

WHAT IS CLAIMED IS:

1. A web browser apparatus comprising:
 - image storing means for storing an inputted image;
 - action identification code analyzing means for extracting an action identification code for deciding the next action from the input image stored in said image storing means and analyzing the action identification code;
 - action deciding means for deciding the next action based on an analysis result of the action identification code by said action identification code analyzing means and said input image;
 - obtaining means for obtaining page data from a web server in accordance with the action decided by said action deciding means;
 - action identification code preparing means for, if a user instructs by filling in a physical medium on which the obtained page data is printed, preparing an action identification code to be used for deciding an action corresponding to the instruction based on the obtained page data;
 - output image preparing means for preparing an output image based on the prepared action identification code and the obtained page data; and
- 25 print controlling means for controlling such that the prepared output image is printed on a physical medium.

2. The web browser apparatus according to claim
1, further comprising:

a scanner for reading a physical medium to prepare
an input image and inputting the input image in said
5 image storing means; and

a printer for printing to output an output image
controlled by said print controlling means to a
physical medium.

10 3. The web browser apparatus according to claim
1,

wherein said action identification code includes
data for identifying each action that can be taken and
data for identifying filling-in for selecting said
15 action.

4. The web browser apparatus according to claim
1,
wherein said action identification code includes
20 data for obtaining data for identifying each action
that can be taken.

5. The web browser apparatus according to claim
1,
25 wherein said action identification code includes
at least one of a URL record of page data to be
outputted, a base record indicating contents of a base

tag, an anchor record indicating contents of an anchor tag, a form record indicating contents of a form tag, a submit record indicating submission of a form element, a reset record indicating reset of a form element, a
5 radio button record of a form element and a check box record of a form element.

6. The web browser apparatus according to claim

1,

10 wherein said output image preparing means prepares an output image by adding a position marker for specifying a position of said output image as well.

7. The web browser apparatus according to claim

15 1,

wherein said output image preparing means prepares an output image by laying said obtained page data and said prepared action identification code one on top of the other in the form in which said action
20 identification code can be extracted.

8. The web browser apparatus according to claim

1,

wherein one or a plurality of said action
25 identification codes are included on said output image.

9. The web browser apparatus according to claim

1,

wherein said action identification code is outputted to said output image in a predetermined color.

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10. The web browser apparatus according to claim 1,

wherein said action deciding means decides said next action based on whether a control area having a 10 predetermined color is filled in.

11. The web browser apparatus according to claim 1,

wherein said action identification code is 15 arranged and printed in a predetermined position with respect to a control area for determining whether a user has filled in.

12. The web browser apparatus according to claim 20 1,

wherein said output image preparing means has a control area that is selected and designated in advance with respect to a control area in which a user fills in and the selected and designated control area is 25 prepared as an image that can be distinguished from filling-in by the user.

13. The web browser apparatus according to claim
1,

wherein said action identification code preparing
means prepares said action identification code by
5 combining it with a logo with which a user can identify
if said action identification code is included in a
printed physical medium.

14. The web browser apparatus according to claim
10 1,

wherein said action identification code is
prepared using two-dimensional bar codes.

15. The web browser apparatus according to claim
15 1,

wherein said action identification code preparing
means prepares an action identification code including
action identification data that is used for deciding,
if a user instructs by filling in a physical medium on
20 which the obtained page data is printed, an action
corresponding to the instruction and permission data
for permitting processing of a physical medium on which
the obtained page data is printed.

25 16. The web browser apparatus according to claim
15,

wherein said action identification code analyzing

means stops processing if the browser apparatus does not match the permission data included in said analyzed action identification code.

5 17. A web browser apparatus according to claim

15,

wherein said action identification code preparing means performs charging processing according to a permission target apparatus of said permission data.

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18. A web browser apparatus comprising:

obtaining means for obtaining page data from a web server;

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action identification code preparing means for, if a user instructs by filling in a physical medium on which the obtained page data is printed, preparing an action identification code to be used for deciding an action corresponding to the instruction based on said obtained page data;

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output image preparing means for preparing an output image based on the prepared action identification code and the obtained page data; and

25

print controlling means for controlling such that the prepared output image is printed on a physical medium.

19. A web browsing method comprising:

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- an action identification code analyzing step of extracting an action identification code for deciding the next action from an input image and analyzing the action identification code;
- 5 an action deciding step of deciding the next action based on an analysis result of the action identification code by said action identification code analyzing step and said input image;
- 10 an obtaining step of obtaining page data from a web server in accordance with the action decided by said action deciding step;
- 15 an action identification code preparing step of, if a user instructs by filling in a physical medium on which the obtained page data is printed, preparing an action identification code to be used for deciding an action corresponding to the instruction based on the obtained page data;
- 20 an output image preparing step of preparing an output image based on the prepared action identification code and the obtained page data; and
- 25 a print controlling step of controlling such that the prepared output image is printed on a physical medium.
20. The web browsing method according to claim 19, further comprising:
- an input step of reading a physical medium by a

scanner to prepare and input said input image; and
a print step of printing to output an output image
controlled by said print control step to a physical
medium by a printer.

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21. The web browsing method according to claim
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wherein said action identification code includes
data for identifying each action that can be taken and
10 data for identifying filling-in for selecting said
action.

22. The web browsing method according to claim
19,

15 wherein said action identification code includes
data for obtaining data for identifying each action
that can be taken.

23. The web browsing method according to claim
20 19,

wherein said action identification code includes
at least one of a URL record of page data to be
outputted, a base record indicating contents of a base
tag, an anchor record indicating contents of an anchor
25 tag, a form record indicating contents of a form tag, a
submit record indicating submission of a form element,
a reset record indicating reset of a form element, a

radio button record of a form element and a check box record of a form element.

24. The web browsing method according to claim

5 19,

wherein, in said output image preparing step, an output image is prepared by adding a position marker for specifying a position of said output image as well.

10 25. The web browsing method according to claim

19,

wherein, in said output image preparing step, an output image is prepared by laying said obtained page data and said prepared action identification code one on top of the other in the form in which the action identification code can be extracted.

26. The web browsing method according to claim

19,

20 wherein one or a plurality of said action identification codes are included on said output image.

27. The web browsing method according to claim

19,

25 wherein said action identification code is outputted to said output image in a predetermined color.

28. The web browsing method according to claim

19,

wherein said action deciding step decides said
next action based on whether a control area having a
predetermined color is filled in.

5 29. The web browsing method according to claim

19,

wherein said action identification code is
10 arranged and printed in a predetermined position with
respect to a control area for determining whether a
user has filled in.

30. The web browsing method according to claim

15 19,

wherein, in said output image preparing step,
there is a control area that is selected and designated
in advance with respect to a control area which a user
fills in and the selected and designated control area
20 is prepared as an image that can be distinguished from
filling-in by the user.

31. The web browsing method according to claim

19,

25 wherein, in said action identification code
preparing step, said action identification code is
prepared by combining it with a logo with which a user

can identify if said action identification code is included in a printed physical medium.

32. The web browsing method according to claim
5 19,

wherein said action identification code is prepared using two-dimensional bar codes.

33. The web browsing method according to claim
10 19,

wherein, in said action identification code preparing step, an action identification code is prepared which includes action identification data that is used for deciding, if a user instructs by filling in
15 a physical medium on which the obtained page data is printed, an action corresponding to the instruction and permission data for permitting processing of a physical medium on which the obtained page data is printed.

20 34. The web browsing method according to claim
33,

wherein, in said action identification code analyzing step, processing is stopped if the browser apparatus does not match the permission data included
25 in said analyzed action identification code.

35. The web browsing method according to claim

33,

wherein, said action identification code preparing step, charging processing according to a permission target apparatus of said permission data is performed.

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36. The web browsing method comprising:

an obtaining step of obtaining page data from a web server;

an action identification code preparing step for,
10 if a user instructs by filling in a physical medium on which the obtained page data is printed, preparing an action identification code to be used for deciding an action corresponding to the instruction based on the obtained page data;

15 an output image preparing step for preparing an output image based on the prepared action identification code and the obtained page data; and
a print controlling step for controlling such that
the prepared output image is printed on a physical
20 medium.

37. A physical medium including an action identification code that is applied print control and printed by a web browser apparatus comprising:

25 obtaining means for obtaining page data from a web server;

action identification code preparing means for, if

a user instructs by filling in a physical medium on which the obtained page data is printed, preparing an action identification code to be used for deciding an action corresponding to the instruction based on the
5 obtained page data;

output image preparing means for preparing an output image based on the prepared action identification code and the obtained page data; and
print controlling means for controlling such that
10 the prepared output image is printed on a physical medium.

38. A web browsing program executable by a computer, comprising:
15 an action identification code analyzing step of extracting an action identification code for deciding the next action from an input image and analyzing the action identification code;
an action deciding step of deciding the next action based on an analysis result of the action identification code by said action identification code analyzing step and said input image;
20 an obtaining step of obtaining page data from a web server in accordance with the action decided by the action deciding step;
25 an action identification code preparing step of, if a user instructs by filling in a physical medium on

which the obtained page data is printed, preparing an action identification code to be used for deciding an action corresponding to the instruction based on the obtained page data;

5 an output image preparing step of preparing an output image based on the prepared action identification code and the obtained page data; and
 a print controlling step of controlling such that
 the prepared output image is printed on a physical
10 medium.

39. A web browsing program executable by a computer, comprising:

15 an obtaining step of obtaining page data from a web server;
 an action identification code preparing step of, if a user instructs by filling in a physical medium on which the obtained page data is printed, preparing an action identification code to be used for deciding an action corresponding to the instruction based on the obtained page data;
20 an output image preparing step of preparing an output image based on the prepared action identification code and the obtained page data; and
25 a print controlling step for controlling such that the prepared output image is printed on a physical medium.

40. A storage medium having stored therein a computer readable web browsing program comprising:
- an action identification code analyzing step of extracting an action identification code for deciding
5 the next action from an input image and analyzing the action identification code;
- an action deciding step of deciding the next action based on an analysis result of the action identification code by said action identification code
10 analyzing step and said input image;
- an obtaining step of obtaining page data from a web server in accordance with the action decided by the action deciding step;
- an action identification code preparing step of,
15 if a user instructs by filling in a physical medium on which the obtained page data is printed, preparing an action identification code to be used for deciding an action corresponding to the instruction based on the obtained page data;
- 20 an output image preparing step of preparing an output image based on the prepared action identification code and the obtained page data; and
a print controlling step of controlling such that
the prepared output image is printed on a physical
25 medium.

41. A storage medium having stored therein a

computer readable web browsing program comprising:

an obtaining step of obtaining page data from a web server;

an action identification code preparing step of,

5 if a user instructs by filling in a physical medium on which the obtained page data is printed, preparing an action identification code to be used for deciding an action corresponding to the instruction based on the obtained page data;

10 an output image preparing step of preparing an output image based on the prepared action identification code and the obtained page data; and

a print controlling step of controlling such that the prepared output image is printed on a physical

15 medium.